

CURRENT STATUS OF UNANI SYSTEM
OF MEDICINE IN AFGHANSTAN

By

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VHAI

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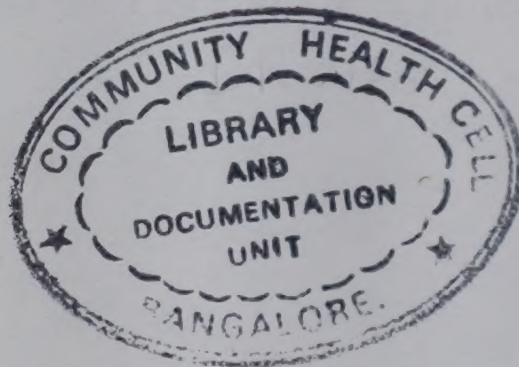


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Voluntary Health Association of India (VHAI) started with the objective of taking health care outside the hospital walls and for building awareness about the linkages between social justice and health services.

The Voluntary Health Association of India (VHAI) is a secular, non-profit, charitable society formed by the federation of 16 State Voluntary Health Associations, linking over 4000 Health Institutions, Projects and Community Health Programmes throughout the country in a Health Movement. It is registered under the Societies Registration Act 1860.

"VHAI assists in making community health a reality for all the people of India, with priority for the less privileged millions with their involvement and participation through the Voluntary Health Sector."

INTRODUCTION AND HISTORICAL BACKGROUND:

Afghanistan is a mountainous country situated in the heart of Asia with an area of 250000 square miles and extreme variation in climate. The great variation in its climate, provides the country to embrace almost all types of medicinal and aromatic plants.

The Folkloric or Traditional System of Medicine (Unani Medicine) in Afghanistan, originates back to times immemorial. In fact, human-beings started to use natural resources, mainly plants, to maintain and to get rid of the diseases, aches, and to save themselves from dangers and enemies since the start of life. Prior to the advent of Unani System of Medicine and that of the Arab Folkloric Medicine, there existed traditional system of medicine in todays Afghanistan. Even before the influence of the Afghan Traditional Medicine by the neighbouring and non-neighbouring countries, people of Afghanistan were primitively self dependent with regards to health care. This can be obvious from the actual practices of health care through traditional system of medicine that even today is currently goin in certain rural areas in Afghanistan. For example, in Hazarajat, (one of the least privilaged areas in Afghanistan) the people are mainly dependent on their own traditional system of medications.

The practice of the Afghanistan Folkloric or Traditional Medicine has been a heritage from the ancestors through stories from tongue to tongue and from father to son, and through some written documents. However, after immigrations to and fro Afghanistan, the traditional system of medicine was also influenced and some more experiences were added to the system. The system was mainly influenced by the Indo-Chinese, Unani and Persian systems of medicine. But, the main and fundamental changes in the Afghan traditional system of medicine have been envisaged after the introduction of Islam in Afghanistan. Islam as the religion in Afghanistan; and the strong Islamic beliefs of the people; the holy Kuran being in Arabic, provided the tendency and obvious interest and curiosity for the people towards Arabic language. This is the major cause and the main reason for the Afghan practitioners in various fields of traditional medicine to utilize

Arabic books and descriptions available in various fields of medicine since the earliest stages of Islam in Afghanistan. Several Arabic books and many other documents Arabic books and/or portions of the books and some written documents were brought to Afghanistan and utilized by the practitioners. That is why almost all of the medical terms and expressions used by these practitioners are still in Arabic. In fact, valuable and scientific books and documents were published by the Arabs, some of which became very famous in the east and west. For example, the books Al-Hawi (written by Al Razi, 850-923 A.D.) and Al-Qanoon (Avicenna, 980-1030 A.D.) and Al-Tasrif (written by Abu al Qasim Al-Zahrawy who died in 1013 A.D.), were the text books in the Arabic speaking world as well as in European Universities for several centuries (3 and 4). Al-Hawi was translated to Latin in 1486 in Broacia and published in Venice in 1547. Al-Razi, was the first to describe small-pox and measles in his valuable treatise Al-Hasba wa-al-Judari, which is considered as the best heritage of Arab medicine. It was the first clinical account of small pox which he gave and differentiated it from measles. Al-Qanoon of Ave Sina, according to Osler, was a (medical bible) for a longer period than any other book, (3).

TRADITIONAL HEALERS:

A traditional healer is usually a respectful and beloved person who is easily available to his/her community. In general, there are two categories of traditional practitioners: 1) those who have qualifications and diplomas from a recognised institution mainly from India and Pakistan. 2) those who are unqualified academically, but have enough traditional experiences from the ancestors (i.e. father, grand-

father or Khalifas, which means teacher).

The traditional healers or the traditional practitioners in Afghanistan are designated by various names. The following designations are the most popular names for traditional practitioners:

1. The Hakeem; the word Hakeem is derived from the Arabic word (Hekma), which means wisdom and knowledge and specially is referred to those who have Unani medical information and cure the patients. A considerable number of people, particularly those living in provinces and villages, have strong beliefs in traditional system of medicine due mainly to unavailability of health care centres, doctors, pharmacists and nurses, so that some of the Hakeems and Attars daily receive hundreds of patients that most of them are completely cured. While some may suffer even worse.
2. The Attar; the word Attar, also has been derived from an Arabic word (Atr), which means perfume and is used for those who extract the essential oils from medicinal and aromatic plants. However, in general sense, an Attar is the one who usually prepares perfumeries as well as herbal Unani medicines.
3. Shekista-band; that is composed of two words. Shekista, meaning fracture or broken and Band meaning to tie with bandage. Simply it means bone-setter. Some of the Shekista-band are highly expert people.
4. Mar-geer; is composed of two words namely, Mar which means snake, and Geer which means to catch. Generally a Mar-Geer is the one who catches poisonous snakes, scorpions, poisonous spiders, bees, etc.

without pre-mediations. Mar-geers, are highly respected among traditional practitioners. In fact, they are able to cure serious snake bites by praying and applying certain herbal medicine. By an unknown and extraordinary (un-explainable) manner or mechanism they excrete the venom of the snake, scorpion, etc. from the region of the bite, through praying and some special acts. Wherever and whenever there is a snake bite, the preference and first choice is given to the Mar-geers. Mar-geers also cure certain skin diseases and joint pains.

The Mar-geer is also called as Dam-gar, Dam-gar simply means prayer. The one who has the ability to cure an insect bite including snake bite by praying and/or magic.

Daya or Dayi; A Dayi (mid-wife) is a lady with enough experience for child delivery and mother and child care during pregnancy, delivery and lactation. A Dayi will be visiting the mother and the child for three consecutive days after delivery and advises for special diet, to increase the milk secretion. Likewise, the Daya gives instructions to pour seeds of (espad) and pieces of (Burboo) on a coal fire 2-3 times daily in the patients room to induce some smoke aiming to kill the germs. Also the Dayi advises the delivering lady to use helba tea (*Trigonella Foenem-graecum* L.) and to add helba seeds in the food. So it is believed that helba will facilitate milk flow in the breast alviols and helps in the relief of uterine and abdominal pains. In fact, a Dayi has enough experience in advising specific diets or regulating the quality and quantity of food to treat certain delivery ailments of the mother and some disorders of the child.

6. The Salmani or Dalak; is mainly involved in circumcision and some of them use the massage techniques to relieve pain or muscle stretch.
7. The Mullah; is a religious person who is trying to give healing through prayers, charms and some acts to avert evil. Mentally ill patients (particularly Grandmal epileptics) and psychic people are their main patients. It should be noted that a(Mullah) is different from those of the (Dam-gar)

TECHNICS FOR DIAGNOSIS:

In the process of diagnosis the following are carefully checked within the patients by the practitioners.

The physical status and temperament of the patient will be considered the most important in diagnosing a disease. They observe and examine the eyes for corneal colour change, lacrimation, dullness or brightness. Examination of the nasal secretions, tongue, ears, skin colour, are other diagnostic parameters. Urine and stool physical characteristics are indicative for health or disease states. Pulse is carefully examined whether it is fast or slow and whether it is strong or weak. Besides, the patients full annamness and the history of his illness is taken and particular attention is made in urine and stool passage, and sleep and emotional characteristics of the patient.

Then, according to diagnosis achieved, certain drugs (mostly mixtures in the form of pillules) will be given to the patient against small charge.

A brief description of the patient's status will be recorded and kept in the informal diary book that may be needed during the next visits.

DISEASES CLAIMED TO BE CURED:

Traditional system of medicine is successful to cure several diseases and ailments. The followings have been treated:

1. Allergic and non allergic acute and chronic skin diseases including leukoderma and eczema.
2. Certain eye diseases
3. Peptic ulcers and gastrointestinal disorders
4. Hypertension
5. Rhumatic diseases
6. Bronchial asthma
7. Worm infestation
8. Diabetes mellitus
9. Haemorrhoid
10. Congestive heart failure
11. Snake and insect bites and stings
12. Leishmaniosis
13. Leprosy

LEGISLATION (Legal Aspects of Traditional Medicine)

There are no Unani or Traditional medical colleges for the education and training of practitioners. Therefore, so far, no official laws and/or rules or regulations have been devised regarding the practice of traditional medicine in Afghanistan. However, the practitioners in this field, should be registered at the Ministry of Public Health. Since a decade, it has been decided that the educated traditional practitioners, must have got a bonafide diploma from a recognized institute or college of Unani medicine from abroad.

In the early seventies, (before political changes of 1978 in Afghanistan), the Ministry of Public Health in collaboration with Kabul University (faculty of pharmacy,) planned a thorough study of traditional medicine in an attempt to establish a NEW INSTITUTE OF UNANI AND ACUPUNCTURE MEDICINE and to regulate and legislate it officially. But

it was not achieved due to political changes and disturbances in the country.

ROLE OF TRADITIONAL MEDICINE IN HEALTH CARE:

The practice of traditional medicine in Afghanistan and the system of drug utilization through this system is of great importance. Under present conditions, the traditional system of medicine in Afghanistan plays a major role in the community health care particularly in that of primary health care. This is because:

1. Many people, particularly those living in rural areas are accustomed to traditional system of medicine and have strong beliefs in the system.
2. No evidences of mortality, toxicity or serious side effects have been reported using Unani medicines.
3. Unani medicines are easily and readily obtained with the lowest costs at peoples localities.
4. People cannot easily and safely go to the health care centres (if there is any) due to nonavailability of transport facilities.
5. As no one system i.e. (allopathic or traditional systems) could completely and entirely serve all the people .
6. The traditional system of medicine is complementary and supplementary to modern medicine. The incorporation of both systems will play an important role in health care of the community and eradication of the ailments.
7. At the time being, the government is unable to furnish health services to the rural areas. Not only that, even in some major cities, governmental health services are very poor and insufficient.

RESEARCH

The Unani or Traditional system of Medicine in Afghanistan as yet is untouched with regards to scientific research. The traditional medicine, makes extensive use of a vast number of medicinal and aromatic plants as well as some other natural agents. Medicinal plants are mainly used as compounded drugs and rarely as single ingredient drugs. Since the majority of their remedies are obtained from plants, at the out-set it is necessary to evaluate the Afghan medicinal and aromatic plants as well as the drug formulations and many other aspects of the socio-culture of the Afghan Traditional Medicine.

Since recently, in an attempt to confirm and/or to refuse the traditional beliefs on the medicinal plants, we started PHARMACOGNOSTICAL, PHYTOCHEMICAL and PHARMACODYNAMICAL studies of the most commonly used Afghan medicinal and aromatic plants. For example *Achillea santolina*, is widely used in drops and as an anthelmintic in traditional medicine. When studied scientifically, the plant was shown to induce significant cardiotonic action, while effectless with regards to helminthiasis (12). Tea of the flowering tips of the plant *Heliotropium ellipticum* Ledeb, is vastly used as analgesic and antispasmodic in traditional medicine. Scientific studies are in full agreement with such beliefs(10).

The results of pharmacological and pharmacognostical studies of some of the most commonly used medicinal and aromatic plants by the traditional healers, are shown in Tables I and II. However, for the preservation of the cultural heritage, it is absolutely necessary to carry out a thorough study and research on various aspects of the Afghan Traditional Medicine.

Table (1): PHARMACOLOGICAL STUDIES OF SOME AFOGH MEDICINAL PLANTS WIDELY USED IN UZBEK MEDICINE.

Ser. No.	Name of the Plant (Local names in the brackets)	Parts Used	Active Ingredient	% Active Ingredient	Pharmacological Effects observed in Experimental Animals	Ref. No.
1.	Morus Serrata Robis (Toot-e-Khasak)	Flowers	Alcoholic Extract	10% total	Significant hypoglycemic effects in alorum treated rats.	2
2.	Cichorium Intybus L. (Bekh-e-Kasni)	Roots	Alcoholic Extracts and bitter principles	10% total 0.2% bitter principles	Significant choloretic effect in rabbits	25
3.	Achillea Santolina L. (Boy madaran)	Flower & Leaf	Alcoholic Extract	5.9% total	Significant cardiotoxic effects in O.pigs in comparison to digitalis tincture	11
4.	Achillea santolina L. (Boy madaran)	Flower & Leaf	Alcoholic Extract	5.5% total	Neither anthelmintic, nor antibacterial effects were seen	12
5.	Cichorium Intybus L. (Bekh-e-Kasni)	Roots	Alcoholic Extract	10% total 0.2% bitter principle	Antipyretic effect on experimental fever equivalent to amidopyrine.	13
6.	Cichotium Intybus (Bekn-e-Kasni)	Roots	"	"	Bitter principles and the alcoholic extract induced significant analgeric effect and reduced motor activity in rats.	14
7.	Withania coagulans (Kakna)	Leaf (entire plant)	Extract (Atropine, Reserpine & scopolamine)		Three alkaloids determined LD ₅₀ = 11.6mg/Kg. BW in mice	17
8.	Rhynza Stricta		Extract (Strictamine, Sevarine, Tetrahydrosecamine, vallesciacotamine, secamine & stricla-sine		Six alkaloids determined LD ₅₀ = 25 mg/kg BW in mice	17

Table (1) Continued

9.	<i>Artemisia Scoparia</i> (Torka)	Leaf	Essential oil (scoparone, thymol, eugenol, phellandrene & Simone Santonine	12%	LD50 - 970 mg/kg BW in mice	17
10.	<i>Althaea officinalis</i> Molyneustreatic Papaver rhoeas (Alyoon) <i>Viola odorata</i> (Gul- e-banafana) <i>Verbascum thapsus</i> and <i>Verbascago</i> Pargar	Flowers Flowers Flowers Flowers Flowers Flowers			Promissable to significant expectorant effect was shown in experimental animals	15
11.	<i>Solanum nigrum</i> <i>Solanum laciniatum</i> (Sag angoorak)	Leaf	Solasodine, Solamargine, solaradixine & Pregnenolone		Solasodine & solaradixine induced significant anarogenic effect	-
12.	<i>Solanum nigrum</i> <i>Solanum laciniatum</i>	Leaf	Solasodine Solaradixine Solamargine Pregnemolone		The compounds failed to induce oestrogen-like activity	3
13.	<i>Solanum nigrum</i> (Sag angoorak)	Leaf	Solasodine Solaradixine Solamargine Pregnemolone		Only solasodine induced anascolic activity in rats	3
14.	<i>Solanum nigrum</i> <i>S. laciniatum</i> (Sag angoorak)	Leaf	Solasodine Solaradixine Solamargine Pregnemolone		Solamargine showed significant progesterone-like activity in rats.	6
15.	<i>Solanum nigrum</i> <i>S. laciniatum</i> (Sag angoorak)	Leaf	Solasodine Solaradixine Solamargine Pregnemolone		Solasodine, solaradixine & solamargine exerted corticosteroid-like activity in rats.	5
16.	<i>Helliotropium ellipticum</i> ledeb (Hajhdum or Gajhdum-puta)	Flowering tips	Extract	7.7%	Significant long lasting analgeric action was seen in rats	10

Table (2): PHARMACOGNOSTICAL STUDIES OF SOME AFGHAN MEDICINAL PLANTS
COMMONLY USED IN URAHI MEDICINE

Ser. No.	Name of the Plant (local names in the brackets)	Parts used	Active Ingredient	% Active Ingredient	Remarks	Ref. No.
1.	Thuya orientalis	Dry & fresh Fruits	Essential Oil	4%	3-4 times that of European plants i.e. Thya occidentalis	23
2.	Cupressus sempervirens L.	Fruits	Essential oil (cupressene, thuyone, santalol, thuyo, alpha terpinene, alpha terpineol & beta pinene)	2%		24
3.	Berberis integrifolia Bunge (Zeriank)	Rhizomes Root	Oxycanthine, berberine, berbamine and tetrahydroberberine		Four alkaloids were isolated from B. integrifolia Bunge	1
4.	Glycyrrhiza glabra var (Sheraz-boya)	Roots	Extract (watery) Glycyrrhizine	32% 14.3%		22
5.	Eucalyptus globulus (Uokniyptus)	Leaves	Dry extract Oil Tannin	16% 3.0% 15.2%		20
6.	Ephedra procera Fitch (Kome, Homa)	Twigs & Green Stem	Total alkaloids (ephedrine, pseudoephedrine, pseudoephedrine and methylephedrine)	1-1.7%	Ephedrine (about 80%)	28

7.	<i>Ephedra intermedia</i> Scaevra	Twigs & Stem	Total alkaloids (ephedrine, norephedrine, pseudoephedrine and methyleph- edrine)	0.5-1%	Ephedrine 80%	28
8.	<i>Anethum graveolens</i> L. (Shibet)	Entire plant (without root)	Essential oil (phelandrine and limonene)	5.0%		19
9.	<i>Carum Carvis</i> L. (Zeera)	Seeds	Essential Oil	6-7%	High yielding plant	19
10.	<i>Carum copticum</i> Benth et Hook (Jawari)	Seeds	Essential Oil (thymol)	10%	The highest yielding plant in comparison to other countries	21
11.	<i>Peperidium vulgare</i> Willd (Eodiyam)	Seeds	Essential oil (pellandron and paezone)	7%	Higher yield in comparison to the same plant in India, Egypt, England, etc.	21
12.	<i>Coriandrum sativum</i> (Sasamir)	Seeds	Essential oil		Linalol and pinene were determined.	19
13.	<i>Moringa odorata</i> Bokander	Leaves	Alcoholic Extract	9.7%	Severe cardiotoxicity and diuretic effect was observed	15
14.	<i>Pomegranate</i> (Anar)	Bark of fruit Flowers	Tannin Tannin	24-25% 25-27%	Used in Unani medicine as astringent and tooth infections.	25
15.	<i>Vitis vinifera</i> L. (Angoor) Husnini - Khanda- ahari Munuka - Gholadan	Seeds	Tannins	7.8%-8.5% 9.92% and 9.77% respectiv- ely		27

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